

Claims Listing:

This listing of claims will replace all prior versions, and listings, of claims in the Application:

1. (previously presented) A packaging machine, for loading a plurality of articles into a carton which mechanism comprises carton erecting means for part erecting said carton to define a first article receiving cell, means for selecting a group of articles comprising at least two articles, means for separating said grouped articles from an adjacent like group of articles, means for loading said grouped articles into said first article receiving cell through an open end thereof in the packaged carton and a means for completing the construction of the carton characterised in that said carton erecting means comprises complementary die members, each said die member being mounted to a rotating wheel wherein each said complementary die member is adapted to inter engage when a carton blank is positioned between the two members, such that said die members cause the blank to be folded to define said article receiving cells, one of said complementary die members having a protruding portion extending from a working face thereof and the other of said complementary die members having a recessed portion adapted to receive said protruding portion, when said blank is placed on said receiving member the protruding portion forces part of the blank into said receiving portion.
2. (original) The packaging machine as claimed in claim 1 wherein said carton erecting means comprises a device which effects a change in configuration of the carton from an inoperative configuration in which said first article receiving cell is formed to receive said grouped articles.
3. (canceled)

4. (previously presented) The packaging machine as claimed in claim 1, wherein said selecting means comprises a plurality of channels mounted on an endless chain which said channels are grouped to correspond to the number of articles to be placed into said first article receiving cell and wherein the channels are adapted to substantially align each said article with said first article receiving cell.

5. (original) The packaging machine as claimed in claim 4 wherein the carton comprises a second article receiving cell formed by said carton erecting means in a spaced relationship to said first article receiving cell wherein said grouped channels comprise at least two channels in substantially parallel relationship to one another wherein said at least two channels are adapted to diverge into a plurality of sub-groups wherein each said sub-group is spaced to align an article held in each said sub-group with one of said articles receiving cells.

6. (previously presented) The packaging machine as claimed in claim 1 further comprising a conveyor including means to convey the articles and means to regulate the flow of articles to enable the articles to be aligned with each said carton.

7. (canceled)

8. (previously presented) A mechanism for forming a carton including a pair of article receiving cells, the mechanism comprising complementary die members, each said die member being mounted to a rotating wheel wherein each said complementary die member is adapted to inter engage when a blank is positioned between the two members, such that said die members

cause the blank to be folded to define said article receiving cells, one of said complementary die members having a protruding portion extending from a working face thereof and the other of said complementary die members having a recessed portion adapted to receive said protruding portion, when said blank is placed on said receiving member the protruding portion forces part of the blank into said receiving portion.

9. (canceled)

10. (previously presented) A mechanism for grouping a plurality of articles, comprising an endless series of channels along which articles may be transferred into a plurality of article receiving cells of a carton wherein the channels are organised into groupings whereby each grouping corresponds to a given number of grouped articles to be loaded into the carton, the channels adapted to be substantially parallel to one another and then diverge into sub-groupings to divide the grouped articles into sub-groups, wherein each said sub-grouping is spaced to align an article held in each said sub-group with one of said article receiving cells corresponding to each one of the cells of each carton and wherein the sub-groupings are each substantially parallel to one another to provide in line parallel access to the cells.

11. (canceled)

12. (currently amended) A mechanism for causing a label affixed to an article to be oriented to a predetermined display position wherein the article includes a portion protruding outwardly of the article in a fixed position relative said label, wherein the mechanism comprises support

means ~~adapted to support~~ for supporting an article, and orientation means ~~adapted to cause the article to rotate~~ for rotating the article in the support means until the protruding portion is restrained by abutment means formed in said support means, ~~said support means comprises a channel including a support surface to retain part of the article within said channel, said support surface substantially corresponding to the exterior surface of said retained part of the article.~~

13. (original) The mechanism as claimed in claim 12 wherein one edge of the label affixed to the article overlays an opposed edge of said label to define said protruding portion.

14. (canceled)

15. (canceled)

16. (previously presented) The mechanism as claimed in claims 12, wherein the orientation means comprises a single elongate member connected to resilient means, wherein said elongate member is adapted to abut a portion of said article as said support means is moved in a substantially parallel plane to said elongate member such that a tangential force is applied to said abutting portion of the article to cause the article to rotate.

17. (original) The mechanism as claimed in claim 16 wherein said resilient means is adapted to reduce said tangential force when said protruding portion is restrained by said abutment means.

18. (previously presented) The mechanism as claimed in claim 12, wherein the abutment means is formed from an upper edge of said channel.

19. (previously presented) A packaging machine for loading a plurality of articles into a carton which mechanism comprises carton erecting means for part erecting said carton to define a first article receiving cell, means for selecting a group of articles comprising at least two articles, means for separating said grouped articles from an adjacent like group of articles, means for loading said grouped articles into said first article receiving cell through an open end thereof in the packaged carton and a means for completing the construction of the carton characterised in that said carton erecting means comprises complementary die members, each said die member being mounted to a rotating wheel wherein each said complementary die member is adapted to inter engage when a carton blank is positioned between the two members, such that said die members cause the blank to be folded to define said article receiving cells, one of said complementary die members having a protruding portion extending from a working face thereof and the other of said complementary die members having a recessed portion adapted to receive said protruding portion, when said blank is placed on said receiving member the protruding portion forces part of the blank into said receiving portion, wherein each article includes a label affixed thereto and further includes a portion protruding outwardly of the article in a fixed position relative to said label, the packaging machine further comprising support means adapted to support an article, orientation means adapted to cause the article to rotate in the support means until the protruding position is restrained by abutment means formed in said support means to orient said group of articles prior to loading the articles into the carton.

20. (currently amended) A method of orienting to a predetermined display position wherein an article includes an outwardly protruding portion in a fixed position relative a label, said label being affixed to the article, the method comprising: ~~the steps of~~ supporting the article in a support ~~means~~ during forward movement, moving said support in a substantially parallel plane to an elongate member such that said elongate member abuts a portion of said article such that a tangential force is applied to said abutting portion to rotate ~~rotating~~ the article within the support ~~means~~ until the outwardly protruding portion abuts a portion of the support, ~~means~~ and retaining the article in its desired orientation for loading into a carton.

21. (canceled)

22. (new) An apparatus for causing a label affixed to an article to be oriented to a predetermined display position wherein the article includes a portion protruding outwardly of the article in a fixed position relative said label, comprising:

a support adapted to support the article;

an elongate member adapted to cause the article to rotate in the support until the protruding portion is restrained by abutment means formed in said support, said support comprising a channel including a support surface to retain part of the article within said channel, said support surface substantially corresponding to the exterior surface of said retained part of the article;

resilient means connected to said elongate member; and

wherein said elongate member is adapted to abut a portion of said article as said support is moved in a substantially parallel plane to said elongate member such that a tangential force is applied to said abutting portion of the article to cause the article to rotate.